

## Abstract

A system and method for automatically performing validation and/or formatting procedures for a graphical user interface (GUI) described in a markup language file are disclosed. The graphical user interface markup language description may comprise descriptions of various types of graphical user interface elements for which text is to be validated/formatted, such as form fields, tables, hypertext links, etc. An author of a markup language file may include various custom markup language attributes in order to automatically validate/format text for a GUI element, for example by adding a custom HSFORMAT="usssn" attribute to a GUI element description to indicate that the element should be automatically validated/formatted according to a U.S. social security number pattern. Any of various codes or patterns may be supported in a particular embodiment, and an extensible framework enabling support for new types of codes or patterns to be easily "plugged in" may be utilized, as described below.

The validation/formatting procedures may be managed by an executable component referred to as a "validation/formatting manager component". The manager component may be automatically instantiated when the application parses the markup language file. The validation/formatting manager component is operable to perform validation/formatting for GUI elements, based on the custom markup language attributes. The manager component may determine these attributes by traversing a document object describing the markup language GUI elements and attributes.

The manager component interfaces with the application to receive programmatic events which trigger various types of formatting/validating operations to be performed on the GUI elements.